

What is claimed is:

1. A device comprising:
an inlet for receipt of a sample,
a first chamber coupled to the inlet, the first chamber including at
5 least one affinity region;

a second chamber disposed adjacent to the first chamber, the first
chamber and second chamber sharing a common intermediate member, the
intermediate member having at least one via formed in the common intermediate
member, the second chamber including an assay chip comprising an array of
10 addressable electrodes; and

an outlet coupled to the second chamber.
2. The system of claim 1 wherein the first chamber further includes a
plurality of electrodes.
3. The system of claim 1 wherein the at least one affinity region
15 comprises an affinity matrix.
4. The system of claim 1 wherein the at least one affinity region
comprises a membrane.
5. The system of claim 1 further comprising an electrode adjacent to
the at least one via.
- 20 6. The system of claim 1 wherein the at least one affinity region has
an affinity to nucleic acids.
7. A method of using the device of claim 1 wherein the first chamber
is used to amplify nucleic acids contained in the sample.

8. The method of claim 8 wherein the amplified nucleic acid is eluted through the via and into the second chamber.